INTERNATIONAL SEARCH REPORT

pernational application No. PCT/CA2005/000654

A. CLASSIFICATION OF SUBJECT MATTER PC(7): C22B 3/22, C22B 3/06, C01G 49/06, C22B 3/44, C22B 7/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7: C22B, C01G

USPC: 75, 423

CPC: 53

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) Delphion

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 2,643,204 (Mancke) 23 June 1953 (23-06-1953) * whole document *	1, 3, 4, 13, 14		
Y	US 2,762,703 (Mancke) 11 September 1956 (11-09-1956) * whole document *	1, 3, 4, 11-14		
Y	US 2,916,357 (Schaufelberger) 8 December 1959 (08-12-1959) * col.2, 1.20-28, 50-57, 65-72; example 2 *	1, 3, 4, 7, 11-14, 27		
Y	US 4,097,271 (Swinkels et al.) 27 June 1978 (27-06-1978) * col.8, l.6-13, 19-21; claim 1 *	1, 3, 9, 10		
Υ	US 4,282,190 (Müller et al.) 4 August 1981 (04-08-1981) * col.2, l.1-15; examples *	1, 3, 4, 9, 10-13, 15		
X Y	US 4,414,196 (Matsumoto et al.) 9 November 1983 (08-11-1983) * col.1, 1.59-68; col.4, 1.24-27; col.5, 1.25-32 *	1-4, 7-12, 15-27 13, 14		

[X]	Further documents are listed in the continuation of Box C.	[X]	See patent family annex.		
•	Special categories of cited documents:	"T"	later document published after the international filing date or priority		
"A"	document defining the general state of the art which is not considered to be of particular relevance		later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art		
"O"	document referring to an oral disclosure, use, exhibition or other means	" <u>&</u> "			
"P"	document published prior to the international filing date but later than the priority date claimed	æ	document member of the same patent family		
Date	Date of the actual completion of the international search		Date of mailing of the international search report		
29 July 2005 (29-05-2005)		17 August 2005 (17-08-2005)			
Name and mailing address of the ISA/CA		Authorized officer			
Canadian Intellectual Property Office		1			
Place du Portage I, Cl 14 - 1st Floor, Box PCT		Jay I	Jay Fothergill (819) 997-4842		
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INTERNATIONAL SEARCH REPORT

mational application No. PCT/CA2005/000654

	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	T		
egory*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 6,616,747 (Sumita) 9 September 2003 (09-09-2003) * background of invention; col.3, 1.30-40, 61-67; col.2, 1.1-5; example 1 *	1, 7, 8, 13, 14, 20-25, 27		
Y	CA 2,156,295 (McElroy) 1 September 1994 (01-09-1994) * p.6, 1.16-29; p.11, 1.31-34; claim 1 *	1, 3, 4, 9, 26		
A·	JP 56-129615 A2 (Katsuyasu et al.) 9 October 1981 (09-10-1981) * abstract *	1, 3		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

mational application No. PCT/CA2005/000654

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date		
1100010001				:	
US2643204	23-06-1953	none			
US2762703	11-09-1956	none			
US2916357	08-12-1959	none			
US4097271	27-06-1978	CA1063809 A1	09-10-1979		
 US4414196	08-11-1983	DE3146982 A1 JP1318707C C JP57123831 A US4379183 A	08-07-1982 29-05-1986 02-08-1982 05-04-1983		
US6616747	09-09-2003	CN1406873 A CN1406874 A EP1293480 A1 JP2003201122 A	02-04-2003 02-04-2003 19-03-2003 15-07-2003	·	
CA2156295	01-09-1994	AT152185T T AU6034494 A DE69402834D D1 DE69402834T T2 DK685001T T3 EP0685001 A1 ES2100700T T3 GR3023455T T3 US5336297 A WO9419501 A1	15-05-1997 14-09-1994 28-05-1997 23-10-1997 27-10-1997 06-12-1995 16-06-1997 29-08-1997 09-08-1994 01-09-1994		
JP56129615	09-10-1981	JP1278794C C	29-08-1985		
JP56129615	09-10-1981	JP1278794C C	29-08-1985		